

15.6

1.  $(2u, u+v)$ 
  - a.  $y=v$
  - b.  $(0,0),(10,5),(10,12),(0,7)$
  - c.  $(8,5)$
  - d.  $(0,1),(2,1),(2,3)$
2.  $0 \leq v \leq \sqrt{x}, u \leq x \leq 1$
3.  $-10$
4.  $1$
5.  $4$
6.  $(4u+v, 2u+3v)$
7.  $10.5/126$

16.1

1.  $F(P) = \langle 1, 1 \rangle, F(a) = \langle 1, -1 \rangle$
2.  $F(P) = \langle 0, 1, 0 \rangle, F(a) = \langle 2, 0, 2 \rangle$
3.  $F = \langle 1, 0 \rangle$
4.  $F = x$